

- 1) Tuesday, Sept. 18: Theory of Mind**
- 2) Thursday, Sept. 20: finish Theory of Mind
Conceptual Development 1**
- 3) Tuesday, Sept. 25: Conceptual Development 2**
- Thursday, Sept. 27: EXAM 1**
- 4) Tuesday, Oct. 2: Eyewitness Testimony**
- 5) Thursday, Oct. 4: Culture and Development**

Eyewitness Testimony

October 2, 2012

Are children reliable witnesses?

- A question of enormous importance
 - more than 100,000 children testify in court every year (Ceci & Bruck, 1993)
 - over 40% of these are under 5
 - if convicted, the defendants face very serious punishment
 - 20,000 children a year testify in sexual abuse trials
 - most often these cases don't have physical evidence – children's testimony is crucial

Are children reliable witnesses?

- Testimony relies on autobiographical memory (memory for the events in one's life)
- Autobiographical memory, *at all ages*, is a imperfect and malleable.
- Remembered facts and even entire memories can be constructed based on the suggestions of other people → *suggestibility*

The main issue: Suggestibility

- Adults fall prey to this!

Example 1: Loftus (1974)

- adults watched a movie of a crash involving multiple cars

“Did you see a broken headlight?” vs.

“Did you see the broken headlight?”

- no broken headlight had been present in the movie
- adults said “yes” significantly more often when asked about **the** broken headlight

The main issue: Suggestibility

- Adults fall prey to this!

Example 2: Loftus (1975)

- adults watched a movie of a car involved in a crash

- rural setting, but no barn

- asked, among other things, “How fast was the car going when it passed the barn?”

- a week later, 17% of the subjects remembered seeing a barn (compared to 3% of subjects who did not get this leading question)

The main issue: Suggestibility

- Adults fall prey to this!

Example 3: Loftus (1975)

- adults watched a short clip showing the disruption of a class by **eight** demonstrators
- asked either, “Was the leader of the **four** demonstrators who entered the classroom a male?” or “Was the leader of the **twelve** demonstrators who entered the classroom a male?”
- a week later, a difference in their memory for how many demonstrators they saw: 6.40 vs. 8.85

How about children?

[video]

As you watch, write down all of the different ways interviews of children can go wrong. We'll talk afterwards.

What about children?

- What kinds of situations can lead to false memories in children?
 - Interviewer bias
 - Stereotypes
 - Specific (as opposed to open-ended) questions
 - Repeated specific questions
 - Repeated interviews
 - Use of symbolic tools

Interviewer Bias

- Interviewer has *a priori* beliefs about what happened
 - Asks *leading* questions: “He touched your arm, didn’t he?”
 - *Repeats* same question over and over again until gets desired response.
 - *Fails to ask* questions that explore alternative hypotheses.

→ *Confirmation bias*

Effects of Interviewer Bias

Study by Thompson et al. (1997)

- 5- and 6-year-old children interact with a confederate named Chester (playing a janitor) who is cleaning some dolls and toys in a playroom
- Chester either sticks to cleaning or stops and plays with the toys

Cleaning:
Uh, oh. This doll is dirty. I'd better clean it...I'd better straighten its arms and legs too...you hold its head while I straighten it...Uh oh, its cap is dirty too. I'd better put it in the washing machine...I'd better check the wheels and battery of this truck to make sure they're working. Now I've got to get the dust off this drum....Is there anything else that needs fixing?

Playing:
Oh goodie! Here's a doll. I like to play with dolls. You know what I like to do with dolls? I like to spray them in the face just for fun....Oh no. Look at that hat. I'd like to take it home with me. I like to play with trucks too. Vroom, vroom, this truck is fun. I like to pretend I'm a drummer whenever I can play with a drum....

Effects of Interviewer Bias

Study by Thompson et al. (1997)

- 5- and 6-year-old children interact with a confederate named Chester (playing a janitor) who is cleaning some dolls and toys in a playroom
- Chester either sticks to cleaning or stops and plays with the toys
- Children then interviewed by an interviewer who was “accusatory,” “exculpatory,” or “neutral”
 - 4 interviews: Chester’s “boss”, experimenter, parent

Effects of Interviewer Bias

Chester's Actual Behavior

Interviewer	Cleaning	Playing
Accusatory		
Exculpatory		
Neutral		

Effects of Interviewer Bias

- Accusatory (or incriminating) interviews:

"I need to know what the cleaning man has been doing. You know he sometimes stops working and plays with the toys. He is not supposed to do that."

"Tsk." "He is not supposed to do that." "He did not have permission to do that."

"This doll didn't need to be cleaned. Did you see any dirt on it? Why would he clean a doll that wasn't dirty? Do you suppose he might have just wanted to play with it?"

Effects of Interviewer Bias

- Exculpatory interviews:

"I need to know what the cleaning man's been doing. You know he is supposed to clean the toys. These toys always get dirty, and he is supposed to clean them all over."

"Hmm." "He is supposed to do that." "He has permission to do that."

"This doll needed to be cleaned. Did you see how dirty it was? It looks much cleaner now. He must have cleaned it. Maybe he pretended to play with it but he was really cleaning?"

Effects of Interviewer Bias

Question:

How does the approach of the interviewer change children's memory?

Effects of Interviewer Bias

Study by Thompson et al. (1997)

- Children interviewed by neutral interviewer were factually correct and consistent with what Chester actually did

Effects of Interviewer Bias

Chester's Actual Handling of Toys

Interviewer	Cleaning	Playing
Accusatory		
Exculpatory		
Neutral	Cleaning	Playing

Effects of Interviewer Bias

Study by Thompson et al. (1997)

- When interviewed by someone whose view contradicted what the child observed, children's memory conformed to the interviewer's beliefs

Effects of Interviewer Bias

Chester's Actual Handling of Toys

Interviewer	Cleaning	Playing
Accusatory	Playing	Playing
Exculpatory	Cleaning	Cleaning
Neutral	Cleaning	Playing

Effects of Interviewer Bias

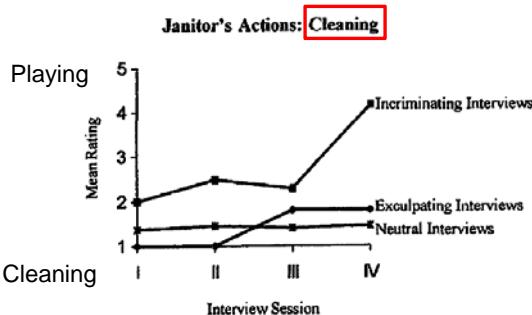
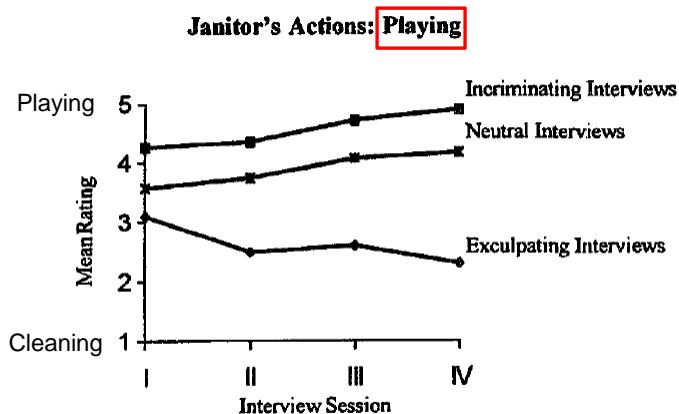


Fig. 1. Mean ratings of children's responses to open-ended questions, showing whether child's account indicated that the janitor was playing or cleaning, as a function of interviewer style and interview session, when the janitor had been playing (top panel) or cleaning (bottom panel). Rating (of child's account): 1 = strongly colored toward cleaning; 2 = colored a bit toward cleaning; 3 = neutral/unclear; 4 = colored a bit toward playing; 5 = strongly colored toward playing. Interview session: I = beginning of interview by boss; II = end of interview by boss; III = interview by experimenter; IV = interview by parent.

Effects of Interviewer Bias



What about children?

- What kinds of situations can lead to false memories in children?
 - Interviewer bias
 - Stereotypes
 - Specific (as opposed to open-ended) questions
 - Repeated specific questions
 - Repeated interviews
 - Use of symbolic tools

Stereotypes

- Children's previous knowledge of the protagonist might affect their memory for the events
 - Texas vs. Macias (1987) case – death sentence based on a child's testimony, after she had been told by her mother repeatedly that the defendant was a "bad man"
 - years later, 12 days before the execution, the witness recanted her testimony

Stereotypes

When I first saw Fred with red stuff on his shirt, I didn't think it was that important. At first, I didn't really know if it was blood or chili. [Note: the defendant worked in a salsa factory, as did Jennifer's mother, hence, the sight of red on people's clothing was common.] Later, when I saw Fred had a gun or a knife, it caught my attention, and I thought that it must be blood. Because different people asked me so many different questions about what I saw, I became confused. I thought I might have seen something that would be helpful to the police. I didn't realize that it would become so important. I thought they wanted me to be certain, so I said I was certain even though I wasn't. Originally, I think I told the police just what I saw. But the more questions I was asked, the more confused I became. I answered questions I wasn't certain about because I wanted to help the adults. (*Texas v. Macias*, 1987; subscribed and sworn before Regina Jarius, Notary, on the 13th day of August, 1988)

Stereotypes

- Sam Stone study (Leichtman & Ceci, 1995)
- For several weeks before Sam's visit, children were told stories such as:

You'll never guess who visited me last night. [pause] That's right. Sam Stone! And guess what he did this time? He asked to borrow my Barbie and when he was carrying her down the stairs, he accidentally tripped and fell and broke her arm. That Sam Stone is always getting into accidents and breaking things! But it's okay, because Sam Stone is very nice and he is getting my Barbie doll fixed for me.

Stereotypes

- Sam Stone visit, no incidents
- children were interviewed several weeks later
- asked several probe questions (e.g., ripping a book, soiling a teddy bear)

Stereotypes

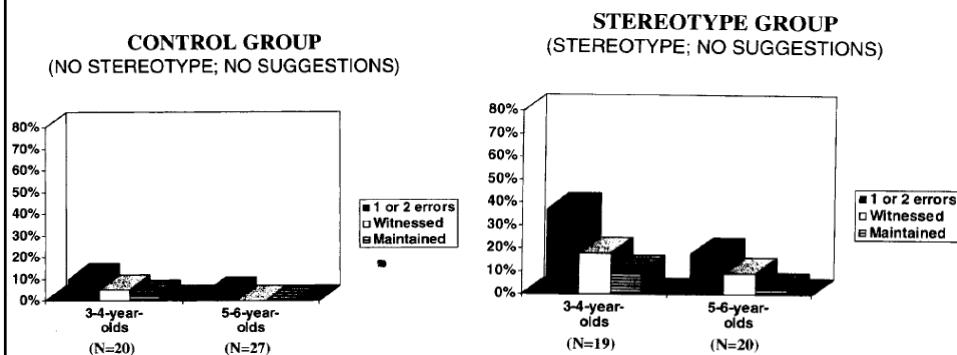


Figure 2. Percentage of preschoolers' answers that were erroneous. Light-colored bar indicates that the child asserted that an incorrect event occurred; dark-colored bar indicates that the child claimed to have actually observed the nonevent; hash-marked bar indicates that the child insisted on having witnessed the event, despite mild attempt at dissuading.

Stereotypes

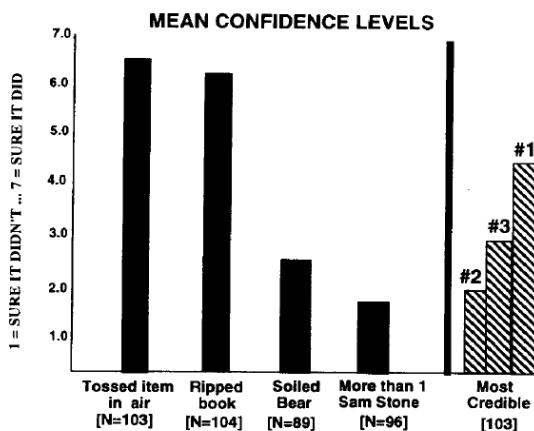


Figure 5. Mean confidence ratings of professionals viewing child interviews (1 = very confident that event did not occur, 4 = uncertain, 7 = very confident event did occur). Hash-marked bars on right side represent overall credibility ratings of 3 children, with Child 1 rated most credible and Child 2 rated least credible. In reality, Child 1 was least accurate, Child 2 was most accurate, and Child 3 was in between in accuracy.

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Specific (rather than open-ended) questions

- Seldom “What happened?”
- More often: “Where did he touch you? Did he touch your face? Did he touch your body?”
- Children often less accurate on the specific questions!

Specific (rather than open-ended) questions

- After a visit to the hospital (Peterson & Bell, 1996):
 - open-ended questions: 91% accuracy
“Tell me about when you hurt yourself.”
 - specific questions: 45% accuracy
“Did you cry? Did it bleed?”

Specific (rather than open-ended) questions

- Another problem: forced-choice questions (e.g., “Did he touch your ears or your nose?”)
 - kids don’t spontaneously say “I don’t know” or “none of the above”

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Repeated specific questions

- What's the problem with repeated questions?
 - kids change their answers to the one they assume you want to hear (b/c you stop asking the question)

Repeated specific questions

- Kids watched an ambiguous event (e.g., a man talking to a woman) and questioned about it (Poole & White, 1991)

The witnessed event. In the first session, a female assistant (Melanie) led each subject into a room to draw one of three stuffed animals. After several minutes, a male assistant (John) burst into the room. Melanie explained to John that no one was allowed in the room during the experiment. John claimed he had been looking everywhere for his pen and, spotting the pen the subject was using, said he saw it and plucked the pen from the subject's hand. Melanie and John argued about the pen in a joking manner until Melanie held the pen behind her back and said "ouch" when John wrested the pen from her hand. John walked to the door while Melanie pouted and held her wrist; he then returned and kissed her on the cheek before leaving. Melanie shrugged and searched for another pen so the subject could complete the picture. The interaction between assistants was very brief, lasting less than a minute.

Repeated specific questions

- Kids watched an ambiguous event (e.g., a man talking to a woman) and questioned about it (Poole & White, 1991)
 - repeated open-ended questions (e.g., “What did the man look like?”)
 - No effect! Why?
 - repeated specific questions (e.g., “Did the man hit the woman?” “Did the man ask nicely for the pen?”)
 - 4-year-old children often changed their answers
 - Became more confident with every answer

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Repeated Interviews

- Example from the movie?

Repeated Interviews

- Example from the movie?
- On average, about 10 interviews before children get to court (Whitcomb, 1992)!
- Between interviews – time for false memories to intrude
- False narratives become more convincing
 - spontaneous comments, details, adjectives, emotional terms, and dialogue statements
 - many studies show that adults **cannot** tell apart true from false memories reported by children.

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Symbolic Tools

- Use of “anatomically correct” dolls
- What happened in the movie?
 - these are novel toys – kids are tempted to explore very thoroughly
 - but there’s another problem

Symbolic Tools

- DeLoache and Marzolf (1995)
 - 2.5-, 3-, and 4-year-olds
 - Experimenter played Simon Says and other games and put stickers on different parts of the child's body.
 - Later, children had to use doll to show where stickers were put.
 - 4-year-olds did well, but not 2.5-year-olds. Below age of 4, children's reports are more accurate *without the doll*.

Symbolic Tools

- DeLoache and Marzolf (1995)

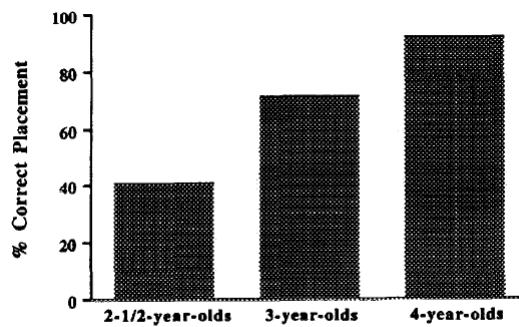


FIG. 1. Percentage of correct sticker placements as a function of age.

Symbolic Tools

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 - Experimenter played Simon Says and other games and put stickers on different parts of the child's body.
 - Later, children had to use doll to show where stickers were put.
 - 4-year-olds did well, but not 2.5-year-olds. Below age of 4, children's reports are more accurate *without the doll*.
 - **Problems with “dual-representation”?**
 - The doll is a physical object but also a symbol (that stands in for the body)

What about children?

- What kinds of situations can lead to false memories in children?
 - Interviewer bias
 - Stereotypes
 - Specific, repeated questions
 - Multiple interviews
 - Use of symbolic tools
- How can we avoid creating false memories?

How to interview a child?

- Do not repeat “yes/no” or other specific questions because this may imply to children that their initial answer was incorrect.
- Keep the number of interviews to a minimum.
- Try to interview children as soon after the event as possible.

How to interview a child?

- Use interviewers who have not already reached conclusions about what has happened to avoid biased questioning.
- Interviewers should be patient, nonjudgmental, not offer rewards for answers, should not make accusations.